

grinding step performed on the wafer will allow the latter to be ground to size with the peripheral profile correctly located relative to the two parallel faces of the wafer.

A5  
32. A method according to claim 17 for use in positioning grinding wheels which cannot be formed and re-formed in situ, particularly metal bonded wheels.

33. A method according to claim 18 for use in positioning grinding wheels which cannot be formed and re-formed in situ, particularly metal bonded wheels.

34. A method according to claim 19 for use in positioning grinding wheels which cannot be formed and re-formed in situ, particularly metal bonded wheels.

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#### REMARKS

The above-referenced case, filed herewith, is a national stage filing under 35 U.S.C. 371, based upon international patent application serial no. PCT/GB00/011562. The international patent application was filed with twenty-two (22) claims numbered 1-22.

During Chapter II proceedings, Applicant amended the claims under Article 34 of the Patent Cooperation Treaty so that a total of twenty (20) claims numbered 1-20, including five (5) independent claims, remained. Amended claims numbered 1-20 were attached as an Annex to the International Preliminary Examination Report dated 02 November 2001.

Applicant respectfully notes that several of the claims numbered 1-20 are in improper multiple-dependent claim form. In an effort to present the claims in a manner which will facilitate efficient review and allowance by the U.S. Patent and Trademark Office, yet while at the same time intending to preserve the subject matter thereof, Applicant has herewith amended claims numbered 3, 7, 10-13 and 18-20 and added new claims 21-34, all of which represent the aforementioned claims numbered 1-20 without the use of multiple-dependent claim form.

Applicant respectfully submits herewith a marked-up version of the amended and new claims. 37 C.F.R. 1.121(c)(1)(ii). Applicant respectfully submits that claims numbered 1-34 submitted herewith are in condition for allowance and respectfully requests the Examiner to pass said claims 1-34 on to allowance.

Should the Examiner have any questions concerning the above, or believe that issues remain in the case, Applicant respectfully requests the Examiner to contact his undersigned counsel, who may be reached by telephone to (513) 841-7032.

Respectfully submitted,

ANDREW MARK STOCKER, Applicant

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#### CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.10

The undersigned hereby certifies that a true and accurate copy of the foregoing "Preliminary Amendment Under 37 C.F.R. 1.115" is being deposited with the U.S. Postal Service, "Express Mail Post Office to Addressee" service, in an enveloped addressed to the Hon. Ass't Comm'r for Patents, United States Patent and Trademark Office, Box PATENT APPLICATION, Washington, D.C. 20231, bearing U.S.P.S. "Express Mail" Label Number EL245144994US, on this the 19th day of December, 2001.



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**MARKED-UP VERSION OF AMENDED/NEW CLAIMS TO SHOW CHANGES MADE**

3. (Amended) A method according to claim 1 [or claim 2] for forming and re-forming grinding wheels, particularly metal bonded grinding wheels, which is performed in situ.

7. (Amended) A method according to claim 5 [or claim 6] when used for grinding wheels.

10. (Amended) A machine according to claim 8 [or claim 9] in which both the wheel and electrode are rotated.

11. (Amended) A machine according to [any one of claims] claim 8 [to 10] in which the electrode is located to the rear of a vacuum chuck on which is normally mounted a disc-like workpiece whose periphery is to be ground.

12. (Amended) A machine according to [any one of claims] claim 8 [to 10] in which a separate disc electrode is employed which is also adapted to be mounted on the workpiece mounting device attached to the workpiece spindle for rotation thereby in place of a workpiece.

13. (Amended) A method of operating a machine according to claim 11 [or claim 12] in which the profile of the ground periphery of the workpiece is measured using an optical inspection system enabling the profile, to be checked by eye, to be checked against a profile or to be optically projected onto a photoelectric device such as a CCD camera of the like, whereby a video signal can be produced for processing and/or display on a visual display unit.

18. (Amended) A method according to claim 16 [or claim 17] in which the preliminary grinds are measured whilst the workpiece is still mounted in the grinding station, or in which the workpiece is de-mounted and taken to an inspection location for the preliminary grinds around its periphery to be measured.

19. (Amended) A method according to [any one of claims] claim 16 [to 18] in which

the preliminary grinds do not encroach into the final size of the wafer so that after the succession of preliminary grinds has been completed and the correct position for the grooved grinding wheel has been selected, a final grinding step performed on the wafer will allow the latter to be ground to size with the peripheral profile correctly located relative to the two parallel faces of the wafer.

20. (Amended) A method according to [any one of claims] claim 16 [to 19] for use in positioning grinding wheels which cannot be formed and re-formed in situ, particularly metal bonded wheels.

21. (New) A method according to claim 2 for forming and re-forming grinding wheels, particularly metal bonded grinding wheels, which is performed in situ.

22. (New) A method according to claim 6 when used for grinding wheels.

23. (New) A machine according to claim 9 in which both the wheel and electrode are rotated.

24. (New) A machine according to claim 9 in which the electrode is located to the rear of a vacuum chuck on which is normally mounted a disc-like workpiece whose periphery is to be ground.

25. (New) A machine according to claim 10 in which the electrode is located to the rear of a vacuum chuck on which is normally mounted a disc-like workpiece whose periphery is to be ground.

26. (New) A machine according to claim 9 in which a separate disc electrode is employed which is also adapted to be mounted on the workpiece mounting device attached to the workpiece spindle for rotation thereby in place of a workpiece.

27. (New) A machine according to claim 10 in which a separate disc electrode is employed which is also adapted to be mounted on the workpiece mounting device attached to the

workpiece spindle for rotation thereby in place of a workpiece.

28. (New) A method of operating a machine according to claim 12 in which the profile of the ground periphery of the workpiece is measured using an optical inspection system enabling the profile, to be checked by eye, to be checked against a profile or to be optically projected onto a photoelectric device such as a CCD camera of the like, whereby a video signal can be produced for processing and/or display on a visual display unit.

29. (New) A method according to claim 17 in which the preliminary grinds are measured whilst the workpiece is still mounted in the grinding station, or in which the workpiece is de-mounted and taken to an inspection location for the preliminary grinds around its periphery to be measured.

30. (New) A method according to claim 17 in which the preliminary grinds do not encroach into the final size of the wafer so that after the succession of preliminary grinds has been completed and the correct position for the grooved grinding wheel has been selected, a final grinding step performed on the wafer will allow the latter to be ground to size with the peripheral profile correctly located relative to the two parallel faces of the wafer.

31. (New) A method according to claim 18 in which the preliminary grinds do not encroach into the final size of the wafer so that after the succession of preliminary grinds has been completed and the correct position for the grooved grinding wheel has been selected, a final grinding step performed on the wafer will allow the latter to be ground to size with the peripheral profile correctly located relative to the two parallel faces of the wafer.

32. (New) A method according to claim 17 for use in positioning grinding wheels which cannot be formed and re-formed in situ, particularly metal bonded wheels.

33. (New) A method according to claim 18 for use in positioning grinding wheels

which cannot be formed and re-formed in situ, particularly metal bonded wheels.

34. (New) A method according to claim 19 for use in positioning grinding wheels which cannot be formed and re-formed in situ, particularly metal bonded wheels.